

HIGH PRESSURE TUBE CLEANING APPARATUS

ABSTRACT OF THE INVENTION

An assembly for rotating and axially directing a high pressure spray hose and spray head to clean residue from the bores of thermal transfer tubes. The assembly includes a number of modular subassemblies that are concentrically aligned and mounted to rotate in synchrony and direct a high-pressure water hose and spray head. An air controlled operator control gun directs spray pressure and hose movement. A hose cleaning subassembly washes and/or brushes and cleans the hose exterior with a low-pressure spray. A hose drive assembly controls hose rotation and axial hose movement via biased pinch wheels that abut the hose. An eccentric linkage and spring tensioners coupled to the pinch wheels release and re-engage the wheels to the hose at a preset pressure. A layering arm stacks the hose in uniform layers at a hose reel. The diameter of the reel hub can adjusted relative to an outer cage. Rotational sensors and/or a pneumatic booster and a disk brake assembly facilitate hose collection and release without kinking or spillage.